Exam

Section 1
Multiple Choice

1. Who were the authors that introduced the Filter Design Pattern?

    a. Gang of Four

    b. Famous Five

    c. Dynamic Duo

    d. Terrific Trio

2. What is the Filter Design Pattern also known as?

    a. Decorator Pattern

    b. Singleton Pattern

    c. Criteria Pattern

    d. Builder Pattern

3. What is the primary purpose of the Filter Design Pattern?

    a. To create objects

    b. To filter objects based on criteria

    c. To manage database connections

    d. To handle user input

4. Which of the following is an advantage of the Filter Design Pattern?

    a. Complexity

    b. Modularity

    c. Increased Codebase

    d. Potential for Over-Abstraction

5. Where can you find sample code for the Filter Design Pattern?

   a. https://github.com/alosadahg/Design-Patterns

   b. https://github.com/patterns/design

   c. https://github.com/filtersample/code

   d. https://github.com/designpatterns/sample

Section 2
Essay

1. What is the Filter Design Pattern and how does it differ from other
   structural design patterns?

2. What are the historical origins of the Filter Design Pattern and who were
   its original authors?

3. In what ways can the Filter Design Pattern be applied in data analysis and
   search engines?

4. What are the steps involved in implementing the Filter Design Pattern?

5. What are the advantages and disadvantages of using the Filter Design Pattern
   in software development?